

AMENDMENT TO THE CLAIMS

Cancel claims 1-46, 48, 49, 52-56, and 62.

Please add new claims 64-96.

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Canceled)
9. (Canceled)
10. (Canceled)
11. (Canceled)
12. (Canceled)
13. (Canceled)
14. (Canceled)
15. (Canceled)
16. (Canceled)
17. (Canceled)
18. (Canceled)
19. (Canceled)
20. (Canceled)
21. (Canceled)
22. (Canceled)
23. (Canceled)
24. (Canceled)

25. (Canceled)
26. (Canceled)
27. (Canceled)
28. (Canceled)
29. (Canceled)
30. (Canceled)
31. (Canceled)
32. (Canceled)
33. (Canceled)
34. (Canceled)
35. (Canceled)
36. (Canceled)
37. (Canceled)
38. (Canceled)
39. (Canceled)
40. (Canceled)
41. (Canceled)
42. (Canceled)
43. (Canceled)
44. (Canceled)
45. (Canceled)
46. (Canceled)

47. (Currently Amended) A method comprising:

coupling, via a magnetic signal, a signal to a therapeutic transducer
contained in an endoluminal implant; and

activating said therapeutic transducer in response to said magnetic
signal, the activating including ultrasonically activating a drug.

48. (Canceled)

49. (Canceled)

50. (Original) The method of claim 47, further including:

coupling a diagnostic signal from a diagnostic transducer contained in said endoluminal implant to an implantable electronic circuit that is coupled to said endoluminal implant;

transmitting said diagnostic signal from a RF coupling coil that is electrically coupled to said implantable electronic circuit; and

receiving said diagnostic signal at a location outside of a patient's body within which said endoluminal implant is implanted.

51. (Original) The method of claim 50 wherein activating said therapeutic transducer includes activating said therapeutic transducer in response to said diagnostic signal.

52. (Canceled)

53. (Canceled)

54. (Canceled)

55. (Canceled)

56. (Canceled)

57. (Currently Amended) A method comprising:

receiving, at a location outside a patient's body, a diagnostic signal from a diagnostic transducer coupled to an endoluminal implant disposed within a patient's body;

transmitting, from said location outside said patient's body, a therapeutic signal in response to receiving said diagnostic signal; and

activating a therapeutic transducer that is coupled to said endoluminal implant in response to said therapeutic signal. the activating including ultrasonically activating a drug.

58. (Original) The method of claim 57 wherein receiving a diagnostic signal includes receiving a diagnostic signal describing fluid flow through a lumen of said endoluminal implant.

59. (Original) The method of claim 58 wherein activating a therapeutic transducer includes providing, within said lumen, energy for activating a drug precursor.

60. (Original) The method of claim 57, further comprising:
transmitting, from said location outside said patient's body, a power signal for providing electrical power to implantable electronic circuitry coupled to said endoluminal implant; and

receiving said power signal by a RF coupling coil disposed within said patient's body and electrically coupled to said implantable electronic circuitry.

61. (Original) The method of claim 57, further comprising transmitting, from said location outside said patient's body, a power signal via a hardwired connection extending from said location outside said patient's body to said implantable electronic circuitry, said power signal for providing electrical power to implantable electronic circuitry coupled to said endoluminal implant.

62. (Canceled)

63 (Original) The method of claim 57 wherein receiving a diagnostic signal includes:

receiving a first diagnostic signal describing fluid pressure at a first end of a lumen of said endoluminal implant; and

receiving a second diagnostic signal describing fluid pressure at a second end of said lumen of said endoluminal implant.

64. (New) A method comprising:
coupling, via a magnetic signal, a signal to a therapeutic transducer
contained in an endoluminal implant; and
activating said therapeutic transducer in response to said magnetic signal,
the activating including rupturing delivery vehicles to locally deliver a drug.

65. (New) The method of claim 64, further including:

coupling a diagnostic signal from a diagnostic transducer contained in said endoluminal implant to an implantable electronic circuit that is coupled to said endoluminal implant;

transmitting said diagnostic signal from a RF coupling coil that is electrically coupled to said implantable electronic circuit; and

receiving said diagnostic signal at a location outside of a patient's body within which said endoluminal implant is implanted.

66. (New) The method of claim 65 wherein activating said therapeutic

transducer includes activating said therapeutic transducer in response to said diagnostic signal.

67. (New) The method of claim 64 wherein activating said therapeutic

transducer includes activating a light source.

68. (New) The method of claim 64 wherein activating said therapeutic

transducer includes activating an iontophoretic transducer.

69. (New) A method comprising:

coupling, via a magnetic signal, a signal to a therapeutic transducer contained in an endoluminal implant; and

activating said therapeutic transducer in response to said magnetic signal, the activating including activating an ultrasonic transducer to insonify a lumen of said endoluminal implant with a first ultrasonic signal having a first frequency and a second ultrasonic signal having a second frequency.

70. (New) The method of claim 69, further including:

coupling a diagnostic signal from a diagnostic transducer contained in said endoluminal implant to an implantable electronic circuit that is coupled to said endoluminal implant;

transmitting said diagnostic signal from a RF coupling coil that is electrically coupled to said implantable electronic circuit; and

receiving said diagnostic signal at a location outside of a patient's body within which said endoluminal implant is implanted.

71. (New) The method of claim 70 wherein activating said therapeutic transducer includes activating said therapeutic transducer in response to said diagnostic signal.

72. (New) The method of claim 69 wherein activating said therapeutic transducer includes activating a light source.

73. (New) The method of claim 69 wherein activating said therapeutic transducer includes activating an iontophoretic transducer.

74. (New) A method comprising:
coupling, via a magnetic signal, a signal to a therapeutic transducer contained in an endoluminal implant; and
activating said therapeutic transducer in response to said magnetic signal, the activating including activating an ultrasonic transducer to insonify a lumen of said endoluminal implant with a first ultrasonic signal having a first frequency and a second ultrasonic signal having a second frequency, wherein said first and second ultrasonic signals are collinear.

75. (New) The method of claim 74, further including:
coupling a diagnostic signal from a diagnostic transducer contained in said endoluminal implant to an implantable electronic circuit that is coupled to said endoluminal implant;
transmitting said diagnostic signal from a RF coupling coil that is electrically coupled to said implantable electronic circuit; and
receiving said diagnostic signal at a location outside of a patient's body within which said endoluminal implant is implanted.

76. (New) The method of claim 75 wherein activating said therapeutic transducer includes activating said therapeutic transducer in response to said diagnostic signal.

77. (New) The method of claim 74 wherein activating said therapeutic transducer includes activating a light source.

78. (New) The method of claim 74 wherein activating said therapeutic transducer includes activating an iontophoretic transducer.

79. (New) A method comprising:
receiving, at a location outside a patient's body, a diagnostic signal from a diagnostic transducer coupled to an endoluminal implant disposed within a patient's body;

transmitting, from said location outside said patient's body, a therapeutic signal in response to receiving said diagnostic signal; and

activating a therapeutic transducer that is coupled to said endoluminal implant in response to said therapeutic signal, the activating including rupturing delivery vehicles to locally deliver a drug.

80. (New) The method of claim 79 wherein receiving a diagnostic signal includes receiving a diagnostic signal describing fluid flow through a lumen of said endoluminal implant.

81. (New) The method of claim 80 wherein activating a therapeutic transducer includes providing, within said lumen, energy for activating a drug precursor.

82. (New) The method of claim 79, further comprising:
transmitting, from said location outside said patient's body, a power signal for providing electrical power to implantable electronic circuitry coupled to said endoluminal implant; and

receiving said power signal by a RF coupling coil disposed within said patient's body and electrically coupled to said implantable electronic circuitry.

83. (New) The method of claim 79, further comprising transmitting, from said location outside said patient's body, a power signal via a hardwired connection extending from said location outside said patient's body to said implantable

electronic circuitry, said power signal for providing electrical power to implantable electronic circuitry coupled to said endoluminal implant.

84. (New) The method of claim 79 wherein receiving a diagnostic signal includes:

receiving a first diagnostic signal describing fluid pressure at a first end of a lumen of said endoluminal implant; and

receiving a second diagnostic signal describing fluid pressure at a second end of said lumen of said endoluminal implant.

85. (New) A method comprising:

receiving, at a location outside a patient's body, a diagnostic signal from a diagnostic transducer coupled to an endoluminal implant disposed within a patient's body;

transmitting, from said location outside said patient's body, a therapeutic signal in response to receiving said diagnostic signal; and

activating a therapeutic transducer that is coupled to said endoluminal implant in response to said therapeutic signal, the activating including activating an ultrasonic transducer to insonify a lumen of said endoluminal implant with a first ultrasonic signal having a first frequency and a second ultrasonic signal having a second frequency.

86. (New) The method of claim 85 wherein receiving a diagnostic signal includes receiving a diagnostic signal describing fluid flow through a lumen of said endoluminal implant.

87. (New) The method of claim 86 wherein activating a therapeutic transducer includes providing, within said lumen, energy for activating a drug precursor.

88. (New) The method of claim 85, further comprising:

transmitting, from said location outside said patient's body, a power signal for providing electrical power to implantable electronic circuitry coupled to said endoluminal implant; and

receiving said power signal by a RF coupling coil disposed within said patient's body and electrically coupled to said implantable electronic circuitry.

89. (New) The method of claim 85, further comprising transmitting, from said location outside said patient's body, a power signal via a hardwired connection extending from said location outside said patient's body to said implantable electronic circuitry, said power signal for providing electrical power to implantable electronic circuitry coupled to said endoluminal implant.

90. (New) The method of claim 85 wherein receiving a diagnostic signal includes:

receiving a first diagnostic signal describing fluid pressure at a first end of a lumen of said endoluminal implant; and

receiving a second diagnostic signal describing fluid pressure at a second end of said lumen of said endoluminal implant.

91. (New) A method comprising:

receiving, at a location outside a patient's body, a diagnostic signal from a diagnostic transducer coupled to an endoluminal implant disposed within a patient's body;

transmitting, from said location outside said patient's body, a therapeutic signal in response to receiving said diagnostic signal; and

activating a therapeutic transducer that is coupled to said endoluminal implant in response to said therapeutic signal, the activating including activating an ultrasonic transducer to insonify a lumen of said endoluminal implant with a first

ultrasonic signal having a first frequency and a second ultrasonic signal having a second frequency, wherein said first and second ultrasonic signals are collinear.

92. (New) The method of claim 91 wherein receiving a diagnostic signal includes receiving a diagnostic signal describing fluid flow through a lumen of said endoluminal implant.

93. (New) The method of claim 92 wherein activating a therapeutic transducer includes providing, within said lumen, energy for activating a drug precursor.

94. (New) The method of claim 91, further comprising: transmitting, from said location outside said patient's body, a power signal for providing electrical power to implantable electronic circuitry coupled to said endoluminal implant; and

receiving said power signal by a RF coupling coil disposed within said patient's body and electrically coupled to said implantable electronic circuitry.

95. (New) The method of claim 91, further comprising transmitting, from said location outside said patient's body, a power signal via a hardwired connection extending from said location outside said patient's body to said implantable electronic circuitry, said power signal for providing electrical power to implantable electronic circuitry coupled to said endoluminal implant.

96. (New) The method of claim 91 wherein receiving a diagnostic signal includes: receiving a first diagnostic signal describing fluid pressure at a first end of a lumen of said endoluminal implant; and receiving a second diagnostic signal describing fluid pressure at a second end of said lumen of said endoluminal implant.